



Dart Hawkesbury
1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada
Tel (613) 632-5200

Purchasing Receipts

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due	To
PO039101	MES002-VC	1	1	Net 30	M17-4-H900-R2.500	17-4 SS H900 Round Bar 2.500" : M174PH-H900R0.500 MATERIAL: 17-4 PH COND. H900 AS PER AMS 5643				6	3/14/2018	6	S053355	Stock	3/21/2018	\$ 173.95 / ft	0	\$1.04		
					M17-4-H900-R0.375	17-4 SS H900 Round Bar 0.375" : M174PH-H900R0.500 MATERIAL: 17-4 PH COND. H900 AS PER AMS 5643				12		12	S053356	Stock	3/21/2018	\$ 19.95 / ft	0	\$23.94		
										Total:	18	18							\$98.48	

Plex 3/21/2018 8:37 AM Dart.Dubois.Pascal

METAUX SOLUTIONS INC
1625 BOUL JACQUES CARTIER EST
LONGUEUIL, QUEBEC
J4N 1L7 Tel.: 450 641-3330

Customer: 6323336

Shipping Order 05/03/2018

Order : 133044
Reference : po039101
Bid : 26136
Ship : PICK UP / PICK UP

DART AEROSPACE LTD
1270, ABERDEEN STREET
HAWKESBURY, ONTARIO
K6A 1K7

Ship To

Same

Tel.: 1 613 632-3336

Item No.	Description	Qty	Qty. Delivered	B/O Qty
SR212174	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N ***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N ***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N 17-4 PH STAIN ROU 2.500" DIA COND. H900 1 X 72" ***** ht: 3511 6	6	6	9-89
SR38174	17-4PH ROU .375 DIA COND. H900 2 X 72" ***** ht: 673237 12	12	12	DAS 11 MAR 21 2018
				DAS 11 MAR 21 2018

ship journey collect

jp

S. Hussain

Shipping : _____
Package No : _____
Merchandise Received: _____

Ref. : _____



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO039101

Supplier:	MES002-VC Metaux Solutions 2625 boul Jacques-Cartier Est Longueuil QC J4N 1L7 Canada Phone: 800 558 8858 Fax: 514 633 8044	PO No:	PO039101
		PO Date:	2/23/18
		Due Date:	3/14/18
		Purchase Order Revision:	
		Revision Date:	
		Ship-To Contact:	Lavoie, Chantal Phone: clavoie@dartaero.com
			FEB 23 2018
Ship To:	1270 Aberdeen Street Hawkesbury ON K6A 1K7 Canada Phone: 613-632-5200	Via:	Ground
		Pymt Terms:	Net 30
		Freight Terms:	
		Special Comments:	bid 26136

Items

Line Item	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	M17-4-H900-R2.500		17-4 SS H900 Round Bar 2.500" : M174PH-H900R0.500 MATERIAL: 17-4 PH COND. H900 AS PER AMS 5643	Firmed	3/14/18	6 ft	0 ft	6 ft	\$173.95/ft	\$1,043.70
2	M17-4-H900-R0.375		17-4 SS H900 Round Bar 0.375" : M174PH-H900R0.500 MATERIAL: 17-4 PH COND. H900 AS PER AMS 5643	Firmed	3/14/18	12 ft	0 ft	12 ft	\$19.95/ft	\$239.40

Grand Total: \$1,283.10

Order Notes

Procurement Quality Clauses

- A005 right of entry
- A012 chemical and physical test report
- A016 personnel qualification
- A017 raw material identification (as applicable)
- A026 certification of material conformance
- A041 quality management system
- A042 dart notification by supplier
- A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 2/23/18 10:57 AM dart.lavoie.chantal

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M17-4-H-900-R0.375
 DATE: MAR 21 2018

PO / BATCH NO. 039101/5053356

MATERIAL CERT REC'D: YES
 QUANTITY RECEIVED: 121
 QUANTITY INSPECTED: 121
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.375
 THICKNESS RECEIVED: 0.375
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
CORROSION	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Astm A564
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
PHOTO REQUIRED	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Heat# 673237
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY:	<u>DAS</u>	SIGNED OFF BY:	
DATE:	<u>9-89 MAR 21 2018</u>	DATE:	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

D

PURCHASE MATERIAL: 17-4 PH-S17400 / TYPE 630 SS ROUND BAR
GRAIN MUST BE ALONG LENGTH OF BAR
MINIMUM YIELD STRENGTH PER TABLE
MINIMUM ULTIMATE STRENGTH PER TABLE

SPECIFICATION:
PART NUMBER:
M17-4 | HHHH-R | X.XXX | WHERE: HHHHH SPECIFIES THE MATERIAL CONDITION (PER TABLE BELOW)
COND | O.D. | X.XXX = DIAMETER (IN INCHES)

MATERIAL CONDITION TABLE:

CODE	CONDITION	MIN YIELD TENSILE STRENGTH (KSI) (OMITTED) (CONDITION A NOT ACCEPTABLE)	MIN ULTIMATE TENSILE STRENGTH (KSI)
H900	H900	100	150
H925	H925	170	190
H1025	H1025	155	170
H1075	H1075	145	155
H1100	H1100	125	145
H1150	H1150	115	140
COND A	CONDITION A (SOLUTION TREATED)	105	135

B
NOTES: MATERIAL IN H900 AND H925 CONDITION NOT RECOMMENDED FOR TENSION OR SHEAR APPLICATIONS IN COLD WEATHER CONDITIONS MATERIAL IN H900 AND H925 CONDITION NOT RECOMMENDED FOR APPLICATIONS WHERE STRESS CORROSION CRACKING IS POSSIBLE CONDITION A NOT TO BE USED IN DESIGN FOR FINAL PRODUCT AND SHOULD ALWAYS BE HEAT TREATED

EXAMPLES:

PART NUMBER: M17-4-R-4000
4.000" DIAMETER BAR MIN UTS = 150 KSI MIN YTS = 100 KSI
2.500" DIAMETER BAR H900 CONDITION
3.250" DIAMETER BAR H1025 CONDITION
0.750" DIAMETER BAR A CONDITION

M17-4-H900-R2.500
M17-4-H1025-R3.250
M17-4-COND-A-R0.750

RELEASED
JULY 2017 - 10 - 31
BY: [Signature]

APPROVED

C	ADDED MATERIAL CONDITION (CIR 17-107) REFORMATTED S17400/TYPE 630 ADDED TO PURCHASE MATERIAL (2ND DB-1), ADD AS6A SPEC (C8-1), REF PAR 08-0202A NEW ISSUE	NO	17.09.14
B	REFORMAT Dwg S17400/TYPE 630 ADDED TO PURCHASE MATERIAL (2ND DB-1), ADD AS6A SPEC (C8-1), REF PAR 08-0202A NEW ISSUE	V/S	10.05.20
A	REV.	DESCRIPTION	BY DATE
REV.	DATE	BY DATE	DATE
DESIGN	NO	DART AEROSPACE LTD	
DRAWN	NO	HAWKESBURY, ONTARIO, CANADA	
CHECKED	CP	DRAWING NO.	
MFG APPR.	RA	M17-4-R	
APPROVED	WM	TITLE	
DE APPR.	CP	17-4 SS ROUND BAR	
DATE	17.09.14	SCALE NTS	

REVISION: C
SHEET 1 OF 1
NOT FOR DIRECT MANUFACTURE OR CONTRACTOR USE
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METCOR INC.

560 BOUL. ARTHUR-SAUVÉ, ST-EUSTACHE, QC, J7R 5A8
 Tél.: 450-473-1884
 Télécopieur / Fax administration: 450-491-5498
 Télécopieur / Fax production: 450 491-6454

Certificat de Conformité Certificate of Compliance

BON DE TRAVAIL order	CHARGEMENT load
325921	1

CLIENT / customer 780

METAUX SOLUTIONS
 2625 BOUL. JACQUES-CARTIER EST
 LONGUEUIL QC J4B 6G6

LIVRÉ À / shipped to:

METAUX SOLUTIONS
 2625 BOUL. JACQUES-CARTIER EST
 LONGUEUIL QC J4B 6G6

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COMMANDE DU CLIENT customer po	CLASSIFICATION PIÈCE part classification	MATÉRIEL material	MAÎTRE D'OEUVRE prime contractor	PROGRAM
44268	N/A	17-7PH		

SPÉCIFICATIONS DU PROCÉDÉ

processing specifications

AGE HARDEN

CONDITION H 900

EXIGENCE / requirement	SPÉCIFICATIONS / specified TESTS EXÉCUTÉS / performed	RÉSULTATS DE TESTS / results
HARDNESS	40 - 47 HRC	3 43 - 45 HRC

QUANTITÉ quantity	POIDS weight	DESCRIPTION DES PIÈCES parts description
3	105	BARRES (1) 2.5 X72" (2) 0.375 x 72"

COMMENTAIRES / comments

APPROUVÉ par / Approved by:

DATE: 2018-03-14

Pierre Piché
 Chief Inspector



15 Mar 18

APPROUVE

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M17-4-H900-R2.500
 DATE: MAR 21 2018

PO / BATCH NO.: 03901/6053355

MATERIAL CERT REC'D: YES
 QUANTITY RECEIVED: 6'
 QUANTITY INSPECTED: 6'
 QUANTITY REJECTED: 0'

THICKNESS ORDERED: 2.500
 THICKNESS RECEIVED: 2.500
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<u>N</u>	
CORRECT FINISH	<u>Y</u>	N	
CORROSION	<u>Y</u>	<u>N</u>	
CORRECT GRAIN DIRECTION	<u>Y</u>	N	
CORRECT MATERIAL PER M-DRAWING	<u>Y</u>	N	<i>Astm A564</i>
CORRECT THICKNESS	<u>Y</u>	N	
PHOTO REQUIRED	Y	<u>N</u>	
CORRECT REF # TO LINK CERT	<u>Y</u>	N	<i>Heat# 3512</i>
CORRECT MATERIAL IDENTIFICATION	<u>Y</u>	N	
CORRECT M# ON THE MATERIAL	<u>Y</u>	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<u>N</u>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<u>N</u>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY:	<u>DAS</u> <u>11</u>	SIGNED OFF BY: _____
DATE:	<u>9-89 MAR 21 2018</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

C PURCHASE MATERIAL: 174 PH / S17400 / TYPE 630 SS ROUND BAR
GRAIN MUST BE ALONG LENGTH OF BAR
MINIMUM YIELD STRENGTH PER TABLE
MINIMUM ULTIMATE STRENGTH PER TABLE

C SPECIFICATION:
C PART NUMBER:
AMS 5643 OR ASTM A564
M17-4- HHHHH- R XXXX | COND | O.D.
WHERE: HHHHH SPECIFIES THE MATERIAL CONDITION (PER TABLE BELOW)
X.XXX = DIAMETER (IN INCHES)

C MATERIAL CONDITION TABLE:

CODE	CONDITION	MIN YIELD STRENGTH (KSI)	MIN ULTIMATE TENSILE STRENGTH (KSI)
(OMITTED)	NONE SPECIFIED (CONDITION A NOT ACCEPTABLE)	100	150
H900	H900	170	190
H925	H925	155	170
H1025	H1025	145	155
H1075	H1075	125	145
H1100	H1100	115	140
H1150	H1150	105	135
COND A	CONDITION A (SOLUTION TREATED)		

NOTES: MATERIAL IN H900 AND H925 CONDITION NOT RECOMMENDED FOR
TENSION OR SHEAR APPLICATIONS IN COLD WEATHER CONDITIONS
MATERIAL IN H900 AND H925 CONDITION NOT RECOMMENDED FOR
APPLICATIONS WHERE STRESS CORROSION CRACKING IS POSSIBLE
CONDITION A NOT TO BE USED IN DESIGN FOR FINAL PRODUCT AND
SHOULD ALWAYS BE HEAT TREATED

C EXAMPLES:

PART
4.00" DIAMETER BAR MINUTS = 150 (KSI), MIN YTTS = 100 (KSI)
PART NUMBER
M17-4-R4.000
M17-4-H900-R2.500
3.250" DIAMETER BAR H900 CONDITION
M17-4-H1025-R3.250
0.750" DIAMETER BAR H1025 CONDITION
M17-4-COND4-R0.750

C	ADDED MATERIAL CONDITION (CIR 17-107)	NO	17.09.14
B	REFORMATTED DWG. S17400(DTYPE: 630 ADDED TO PURCHASE MATERIAL (ZN DB-1). ADD A564 SPEC (C8-1).	VS	10.05.20
A	REF PAR 08-020A NEW ISSUE	CP	05.03.16
REV.	DESCRIPTION	BY	DATE

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA
DRAWING NO.
M17-4-R
TITLE
17-4 SS ROUND BAR
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THE WRITTEN APPROVAL OF DART AEROSPACE LTD
PRINTED ON 10/10/2017 BY DART AEROSPACE LTD

A
SHEET 1 OF 1
SCALE
NTS

RELEASED BY 2017-10-31 BY EN17-728

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CERTIFICATE OF TEST

CERTIFICAT D'ESAISS

Page 01 of 02

Certification Date
2-MAR-2018

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

44265-J

Invoice Number
S704031

PART NUMBER/NUMÉRO DE PIÈCE

510547

SOLD TO: METAUX SOLUTIONS INC. SHIP TO: METAUX SOLUTIONS (RIVE-SUD)
VENDU À: EXPÉDIÉ À:
2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1L7
2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1

Description: 17-4 SOL ANN CF BAR
2-1/2 RD S/C 6'0" (72.0")
HEAT: 351L

ITEM: 510547

ASTM A564

Line Total: 100.26 LB

Specifications:

AMS 5643 ASTM A564 T630 13 ASME SA564 T630 07
ASTM F899 12B ASTM A388 S1

CHEMICAL ANALYSIS

C	CB	CO	CR	CU	MN	MO	N
0.0381	0.245	0.058	15.3205	3.181	0.77	0.0255	0.0342
NI	P	S	SI	TA	TI	CBTA	
4.213	0.017	0.022	0.519	0.005	0.002	0.247	

RCPT: R212745

COUNTRY OF ORIGIN : USA

MECHANICAL PROPERTIES

DESCRIPTION COND A	YLD STR	ULT TEN	%ELONG	%RED IN AREA	HARDNESS BHN
DEV: H900 L	YLD STR KSI 181.11	ULT TEN KSI 201.8	%ELONG IN 02 IN 12.93	%RED IN AREA 49.57	HARDNESS RC 43

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcris du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession./Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

JOANNE DESPRES



MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

CERTIFICATE OF TEST

CERTIFICAT D'ESAIS

Page 02 of 02

Certification Date
2-MAR-2018

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

44265-J

PART NUMBER/NUMÉRO DE PIÈCE

510547

Invoice Number
S704031

SOLD TO:	METAUX SOLUTIONS INC.	SHIP TO:	METAUX SOLUTIONS (RIVE-SUD)
VENDU À:		EXPÉDIÉ À:	
	2625 BOUL JACQUES CARTIER EST LONGUEUIL QC J4N 1L7		2625 BOUL JACQUES CARTIER EST LONGUEUIL QC J4N 1

Description: 17-4 SOL ANN CF BAR
2-1/2 RD S/C 6'0" (72.0")
HEAT: 351L

ITEM: 510547

ASTM A564
Line Total: 100.26 LB

MACRO: OK
MICRO1: OK

COMMENTS

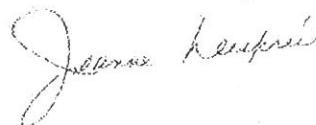
melted and mfg in usa
reduction ratio 11.8:1

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcris du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

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Material did not come in contact with mercury while in our possession./Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

JOANNE DESPRES



MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ